

CLAIM AMENDMENTS

Claims 1-6 (Cancelled).

7. (Currently Amended) A semiconductor laser device fabricating method including the steps of:

~~firstly~~ forming a first ~~clad~~ cladding layer of a first conductivity type, an active layer ~~of having~~ a quantum well structure, and a first ~~second-clad~~ second cladding layer of a second conductivity type successively on a semiconductor substrate of the first conductivity type;

~~secondly~~ forming on a surface of the first ~~second-clad~~ second cladding layer a mask pattern for impurity implantation having an opening in a region where a resonator facet of a semiconductor laser device is ~~expected~~ to be formed;

~~thirdly~~ disordering the active layer near the resonator facet by introducing impurities ~~with using~~ the mask pattern for introducing impurity used as a mask;

~~fourthly~~ applying ~~pumped pump~~ light to the disordered region to generate ~~photo luminescence~~ photoluminescence therefrom, and measuring a wavelength of the ~~photo luminescence~~ photoluminescence as a basis photoluminescence for predicting a level of COD catastrophic optical damage (COD) degradation;

~~fifthly~~ forming a second ~~second-clad~~ second cladding layer of the second conductivity type on the surface of said first ~~second-clad~~ second cladding layer, after removing the mask pattern;

~~sixthly~~ forming on a surface of the said second ~~second-clad~~ second cladding layer a stripe-shaped mask pattern ~~in a manner~~, opposed to the disordered active layer, across the first and the second ~~second-clad layer~~ second cladding layers, the stripe-shaped mask pattern extending in a resonator lengthwise direction; and

~~seventhly~~ forming an optical waveguide including the second ~~second-clad~~ second cladding layer with the stripe-shaped mask pattern used as a mask.

8. (Currently Amended) ~~A~~ The semiconductor laser device fabricating method according to claim 7, wherein, if the semiconductor laser device ~~has an oscillation~~ produces light having a wavelength in the range of 770 to 810 nm, if λ_{dpl} ~~is assumed to denote~~ denotes, in nm, the wavelength of ~~photo luminescence~~ photoluminescence generated by application of ~~pumped pump~~ light to the disordered region, ~~and if~~ λ_{apl} ~~to represent~~ represents, in nm, the wavelength of ~~photo luminescence~~ photoluminescence generated by application of ~~pumped pump~~ light to the active layer, and if a blue shift

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amount λ_{bl} , in nm, is ~~defined as~~ equal to $\lambda_{apl} - \lambda_{dpl}$, then ~~the blue shift amount λ_{bl} meets a condition of $\lambda_{bl} \leq 20$ when said fourth step the pump light is carried out applied to the disordered region.~~

9. (Currently Amended) ~~A~~The semiconductor laser device fabricating method according to claim 8, wherein, if ~~P_{cod} is assumed to denote~~ P_{cod} denotes, in mW, ~~a, the COD level of the laser device, then the blue shift amount λ_{bl} in nm further meets a condition of~~
$$(P_{cod} - 85)/5.6 \leq \lambda_{bl} \leq (P_{cod} - 135.0)/1.3.$$